

I. AMENDMENTS TO THE CLAIMS:

Kindly amend claim 1, and add new claim 111-114 as follows.

The present listing of claims replaces all prior listings or versions of claims in the above-captioned application.

LISTING OF CLAIMS:

1. (Currently Amended) A copper alloy material in wire or bar form for forming a netted structure used in seawater under harsh conditions, wherein the netted structure is exposed to water or waves running at high speed and rubbing, and wherein the copper alloy material comprises a composition including:

(a) 62 to 91 mass% of Cu;

(b) 0.6 to 30.01 to 4 mass% of Sn;

(c) one or more elements selected from the group consisting of 0.02 to 1.5 mass% of Al, and 0.02 to 1.9 mass% of Si; and

(d) the balance being Zn, wherein the composition satisfies the relationship derived from the Cu content [Cu], and the Sn content [Sn], ~~the Al content [Al], and the Si content [Si]~~, in terms of mass%,

$62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3.5[\text{Si}] - 1.8[\text{Al}] \leq 90$, wherein the copper alloy material has a phase structure including an α phase, a γ phase, and a δ phase, and the total area ratio of the α , γ , and δ phases is 95 to 100%, and the copper alloy material forms an Al-Sn coating or a Si-Sn coating when in seawater.

2. (Previously Presented) The copper alloy material according to Claim 1, wherein the composition further contains one or more elements X1 selected from the group consisting of 0.02 to 0.25 mass% of As, 0.02 to 0.25 mass% of Sb, 0.001 to 0.2 mass% of Mg, and 0.01

to 0.25 mass% of P, and the composition satisfies the relationship derived from the Cu content [Cu], the Sn content [Sn], the Al content [Al], the Si content [Si], the P content [P], and the X1 total content [X1] except content [P] in terms of mass%,

$$62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3[\text{P}] - 0.5[\text{X1}] - 3.5[\text{Si}] - 1.8[\text{Al}] \leq 90.$$

3. (Previously Presented) The copper alloy material according to Claim 1, wherein the composition further contains one or more elements selected from the group consisting of 0.05 to 1.5 mass% of Mn, and 0.005 to 0.5 mass% of Ni, and the composition satisfies the relationship derived from the Cu content [Cu], the Sn content [Sn], the Al content [Al], the Mn content [Mn], the Si content [Si], and the Ni content [Ni] in terms of mass%,

$$62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3.5[\text{Si}] - 1.8[\text{Al}] + [\text{Mn}] + [\text{Ni}] \leq 90.$$

4. (Previously Presented) The copper alloy material according to Claim 2, wherein the composition further contains one or more elements selected from the group consisting of 0.05 to 1.5 mass% of Mn, and 0.005 to 0.5 mass% of Ni, and the composition satisfies the relationship derived from the Cu content [Cu], the Sn content [Sn], the P content [P], the X1 total content [X1] except content [P], the Al content [Al], the Mn content [Mn], the Si content [Si], and the Ni content [Ni] in terms of mass%,

$$62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3[\text{P}] - 0.5[\text{X1}] - 3.5[\text{Si}] - 1.8[\text{Al}] + [\text{Mn}] + [\text{Ni}] \leq 90.$$

5. (Previously Presented) The copper alloy material according to Claim 1, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

6. (Original) The copper alloy material according to Claim 5, wherein the Cu content

[Cu] and the Sn content [Sn] satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

7. (Withdrawn) A copper alloy material in wire or bar form for forming a netted structure used in seawater, the copper alloy material comprising a composition containing: 62 to 91 mass% of Cu; 0.01 to 4 mass% of Sn; 0.0008 to 0.045 mass% of Zr; 0.01 to 0.25 mass% of P; and the balance being Zn, the composition satisfying the relationship derived from the Cu content [Cu], Sn content [Sn], and P content [P] in terms of mass%: $62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3[\text{P}] \leq 90$, wherein the copper alloy material has a phase structure including an α phase, a γ phase, and a δ phase, the total area ratio of the α , γ , and δ phases is 95 to 100%, and the average grain size is 0.2 mm or less after melt-solidification.

8. (Withdrawn) The copper alloy material according to Claim 7, wherein the composition further contains at least one element X3 selected from the group consisting of 0.02 to 0.25 mass% of As, 0.02 to 0.25 mass% of Sb, and 0.001 to 0.2 mass% of Mg, and the composition satisfies the relationship derived from the Cu content [Cu], Sn content [Sn], P content [P], and X3 total content [X3] in terms of mass%: $62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3[\text{P}] - 0.5[\text{X3}] \leq 90$, and wherein the total area ratio of the α , γ , δ phases is 95 to 100% and the average grain size is 0.2 mm or less after melt-solidification.

9. (Withdrawn) The copper alloy material according to Claim 7, wherein the composition further contains at least one element X4 selected from the group consisting of 0.02 to 1.5 mass% of Al, 0.05 to 1.5 mass% of Mn, 0.02 to 1.9 mass% of Si, and 0.005 to 0.5 mass% of Ni, and the composition satisfies the relationship derived from the Cu content [Cu], Sn content [Sn], P content [P], Al content [Al], Mn content [Mn], Si content [Si], and Ni

content [Ni] in terms of mass%: $62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3[\text{P}] - 3.5[\text{Si}] - 1.8[\text{Al}] + [\text{Mn}] + [\text{Ni}] \leq 90$, and wherein the total area ratio of the α , γ , δ phases is 95 to 100% and the average grain size is 0.2 mm or less after melt-solidification.

10. (Withdrawn) The copper alloy material according to Claim 8, wherein the composition further contains at least one element X4 selected from the group consisting of 0.02 to 1.5 mass% of Al, 0.05 to 1.5 mass% of Mn, 0.02 to 1.9 mass% of Si, and 0.005 to 0.5 mass% of Ni, and the composition satisfies the relationship derived from the Cu content [Cu], Sn content [Sn], P content [P], X3 total content [X3], Al content [Al], Mn content [Mn], Si content [Si], and Ni content [Ni] in terms of mass%: $62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3[\text{P}] - 0.5[\text{X3}] - 3.5[\text{Si}] - 1.8[\text{Al}] + [\text{Mn}] + [\text{Ni}] \leq 90$, and wherein the total area ratio of the α , γ , δ phases is 95 to 100% and the average grain size is 0.2 mm or less after melt-solidification.

11. (Withdrawn) The copper alloy material according to Claim 7, wherein the Sn content [Sn], Zr content [Zr], and P content [P] of the composition satisfy the relationships $0.5 \leq [\text{P}]/[\text{Zr}] \leq 150$, $1 \leq [\text{Sn}]/[\text{Zr}] \leq 3000$, and $0.2 \leq [\text{Sn}]/[\text{P}] \leq 250$ in terms of mass%.

12. (Withdrawn) The copper alloy material according to Claim 7, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

13. (Withdrawn) The copper alloy material according to Claim 12, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

14. (Withdrawn) The copper alloy material according to Claim 11, wherein the

primary crystal in melt-solidification is in the α phase.

15. (Withdrawn) The copper alloy material according to Claim 46, wherein the copper alloy material has a crystal structure whose dendrite network is fractured after melt-solidification.

16. (Withdrawn) The copper alloy material according to Claim 15, wherein the two-dimensional crystal grain structure is in a circular form or a form similar to the circular form after melt-solidification.

17. (Withdrawn) The copper alloy material according to Claim 7, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

18. (Cancelled)

19. (Withdrawn) The copper alloy material according to Claim 11, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

20. (Withdrawn) A method for manufacturing the copper alloy material in wire or bar form as set forth in Claim 7, the method comprising a casting step in which Zr is added in a form of a copper alloy containing Zr immediately before pouring, thus preventing the addition of an oxide, or a sulfide of Zr, or an oxide and a sulfide of Zr.

21. (Withdrawn) The method for manufacturing the copper alloy material according to Claim 20, wherein the copper alloy containing Zr is a Cu-Zr alloy, a Cu-Zn-Zr alloy, or a Cu-Zr- or Cu-Zn-Zr-based alloy further containing at least one element selected from the group consisting of P, Mg, Al, Sn, Mn, and B.

22. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 2, wherein the copper alloy material is formed into a net or a grid.

23. (Original) The netted structure used in seawater according to Claim 22, wherein the copper alloy material is a waved wire having curved portions, and the netted structure has a rhombically netted form made by arranging a large number of the waved wires in parallel such that the adjacent waved wires are entwined with each other at the curved portions.

24. (Previously Presented) The netted structure used in seawater according to Claim 23, wherein the netted structure is configured as a fish cultivation net.

25. (Original) The netted structure used in seawater according to Claim 24, wherein the fish cultivation net includes a reinforcing frame attached along the lower edge of the net in a ring-shaped manner, and the reinforcing frame maintains the shape of the lower edge of the net and applies a downward tension to the net.

26. (Original) The netted structure used in seawater according to Claim 25, wherein the reinforcing frame is formed of a pipe made of the same copper alloy as the material forming the net.

27. (Previously Presented) The copper alloy material according to Claim 2, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

28. (Previously Presented) The copper alloy material according to Claim 27, wherein the Cu content [Cu] and the Sn content [Sn] satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

29. (Previously Presented) The copper alloy material according to Claim 3, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

30. (Previously Presented) The copper alloy material according to Claim 29, wherein the Cu content [Cu] and the Sn content [Sn] satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

31. (Previously Presented) The copper alloy material according to Claim 4, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

32. (Previously Presented) The copper alloy material according to Claim 31, wherein the Cu content [Cu] and the Sn content [Sn] satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

33. (Withdrawn) The copper alloy material according to Claim 8, wherein the Sn content [Sn], Zr content [Zr], and P content [P] of the composition satisfy the relationships $0.5 \leq [\text{P}]/[\text{Zr}] \leq 150$, $1 \leq [\text{Sn}]/[\text{Zr}] \leq 3000$, and $0.2 \leq [\text{Sn}]/[\text{P}] \leq 250$ in terms of mass%.

34. (Withdrawn) The copper alloy material according to Claim 33, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

35. (Withdrawn) The copper alloy material according to Claim 9, wherein the Sn content [Sn], Zr content [Zr], and P content [P] of the composition satisfy the relationships $0.5 \leq [P]/[Zr] \leq 150$, $1 \leq [Sn]/[Zr] \leq 3000$, and $0.2 \leq [Sn]/[P] \leq 250$ in terms of mass%.

36. (Withdrawn) The copper alloy material according to Claim 35, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

37. (Withdrawn) The copper alloy material according to Claim 10, wherein the Sn content [Sn], Zr content [Zr], and P content [P] of the composition satisfy the relationships $0.5 \leq [P]/[Zr] \leq 150$, $1 \leq [Sn]/[Zr] \leq 3000$, and $0.2 \leq [Sn]/[P] \leq 250$ in terms of mass%.

38. (Withdrawn) The copper alloy material according to Claim 37, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

39. (Withdrawn) The copper alloy material according to Claim 8, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

40. (Withdrawn) The copper alloy material according to Claim 9, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

41. (Withdrawn) The copper alloy material according to Claim 10, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

42. (Withdrawn) The copper alloy material according to Claim 11, wherein the phase structure has a total area ratio of the γ and δ phases of 10% or less.

43. (Withdrawn) The copper alloy material according to Claim 39, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

44. (Withdrawn) The copper alloy material according to Claim 40, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

45. (Withdrawn) The copper alloy material according to Claim 41, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

46. (Withdrawn) The copper alloy material according to Claim 34, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

47. (Withdrawn) The copper alloy material according to Claim 36, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

48. (Withdrawn) The copper alloy material according to Claim 38, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

49. (Withdrawn) The copper alloy material according to Claim 42, the Cu content [Cu] and Sn content [Sn] of the composition satisfy the relationship $1 \leq 0.06[\text{Cu}] - [\text{Sn}] \leq 4.5$ in terms of mass%.

50. (Withdrawn) The copper alloy material according to Claim 35, wherein the primary crystal in melt-solidification is in the α phase.

51. (Withdrawn) The copper alloy material according to Claim 37, wherein the primary crystal in melt-solidification is in the α phase.

52. (Withdrawn) The copper alloy material according to Claim 47, wherein the copper alloy material has a crystal structure whose dendrite network is fractured after melt-solidification.

53. (Withdrawn) The copper alloy material according to Claim 48, wherein the two-dimensional crystal grain structure is in a circular form or a form similar to the circular form after melt-solidification.

54. (Withdrawn) The copper alloy material according to Claim 52, wherein the two-dimensional crystal grain structure is in a circular form or a form similar to the circular form after melt-solidification.

55. (Withdrawn) The copper alloy material according to Claim 8, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

56. (Withdrawn) The copper alloy material according to Claim 9, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

57. (Withdrawn) The copper alloy material according to Claim 10, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

58. (Withdrawn) The copper alloy material according to Claim 11, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

59. (Withdrawn) The copper alloy material according to Claim 35, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

60. (Withdrawn) The copper alloy material according to Claim 13, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

61. (Withdrawn) The copper alloy material according to Claim 43, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

62. (Withdrawn) The copper alloy material according to Claim 44, wherein the composition contains an inevitable impurity being Fe, or Ni, or Fe and Ni, and the contents of inevitable impurities Fe and Ni are each 0.5 mass% or less.

63. (Previously Presented) The copper alloy material according to Claim 27, wherein the copper alloy material is a plastic-processed wire or bar produced by plastic processing of a casting material.

64. (Previously Presented) The copper alloy material according to Claim 31, wherein the copper alloy material is a plastic-processed wire or bar produced by plastic processing of a casting material.

65. (Previously Presented) The copper alloy material according to Claim 28, wherein the copper alloy material is a plastic-processed wire or bar produced by plastic processing of a casting material.

66. (Previously Presented) The copper alloy material according to Claim 32, wherein the copper alloy material is a plastic-processed wire or bar produced by plastic processing of a casting material.

67. (Withdrawn) The copper alloy material according to Claim 33, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

68. (Withdrawn) The copper alloy material according to Claim 35, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

69. (Withdrawn) The copper alloy material according to Claim 37, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

70. (Withdrawn) The copper alloy material according to Claim 36, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

71. (Withdrawn) The copper alloy material according to Claim 38, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

72. (Withdrawn) The copper alloy material according to Claim 42, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

73. (Withdrawn) The copper alloy material according to Claim 46, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

74. (Withdrawn) The copper alloy material according to Claim 47, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

75. (Withdrawn) The copper alloy material according to Claim 49, wherein the copper alloy material is a cast-processed wire or bar, or a combination-processed wire or bar produced by subjecting the cast-processed wire or bar to plastic processing.

76. (Withdrawn) A method for manufacturing the copper alloy material in wire or bar form as set forth in Claim 8, the method comprising a casting step in which Zr is added in a form of a copper alloy containing Zr immediately before pouring, thus preventing the addition of an oxide, or a sulfide of Zr, or an oxide and a sulfide of Zr.

77. (Withdrawn) The method for manufacturing the copper alloy material according to Claim 76, wherein the copper alloy containing Zr is a Cu-Zr alloy, a Cu-Zn-Zr alloy, or a Cu-Zr- or Cu-Zn-Zr-based alloy further containing at least one element selected from the group consisting of P, Mg, Al, Sn, Mn, and B.

78. (Withdrawn) A method for manufacturing the copper alloy material in wire or bar form as set forth in Claim 9, the method comprising a casting step in which Zr is added in a form of a copper alloy containing Zr immediately before pouring, thus preventing the addition of an oxide, or a sulfide of Zr, or an oxide and a sulfide of Zr.

79. (Withdrawn) The method for manufacturing the copper alloy material according to Claim 78, wherein the copper alloy containing Zr is a Cu-Zr alloy, a Cu-Zn-Zr alloy, or a Cu-Zr- or Cu-Zn-Zr-based alloy further containing at least one element selected from the group consisting of P, Mg, Al, Sn, Mn, and B.

80. (Withdrawn) A method for manufacturing the copper alloy material in wire or bar form as set forth in Claim 10, the method comprising a casting step in which Zr is added in a form of a copper alloy containing Zr immediately before pouring, thus preventing the addition of an oxide, or a sulfide of Zr, or an oxide and a sulfide of Zr.

81. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 1, wherein the copper alloy material is formed into a net or a grid.

82. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 3, wherein the copper alloy material is formed into a net or a grid.

83. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 4, wherein the copper alloy material is formed into a net or a grid.

84. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 6, wherein the copper alloy material is formed into a net or a grid.

85. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 7, the copper alloy material being formed into a net or a grid.

86. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 8, the copper alloy material being formed into a net or a grid.

87. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 9, the copper alloy material being formed into a net or a grid.

88. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 10, the copper alloy material being formed into a net or a grid.

89. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 11, the copper alloy material being formed into a net or a grid.

90. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 28, wherein the copper alloy material is formed into a net or a grid.

91. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 30, wherein the copper alloy material is formed into a net or a grid.

92. (Previously Presented) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 32, wherein the copper alloy material is formed into a net or a grid.

93. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 33, the copper alloy material being formed into a net or a grid.

94. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 35, the copper alloy material being formed into a net or a grid.

95. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 37, the copper alloy material being formed into a net or a grid.

96. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 17, the copper alloy material being formed into a net or a grid.

97. (Withdrawn) A netted structure used in seawater, comprising the copper alloy material in wire or bar form as set forth in Claim 56, the copper alloy material being formed into a net or a grid.

98. (Previously Presented) The netted structure used in seawater according to Claim 83, wherein the copper alloy material is a waved wire having curved portions, and the netted structure has a rhombically netted form made by arranging a large number of the waved wires in parallel such that the adjacent waved wires are entwined with each other at the curved portions.

99. (Withdrawn) The netted structure used in seawater according to Claim 85, wherein the copper alloy material is a waved wire having curved portions, and the netted structure has a rhombically netted form made by arranging a large number of the waved wires in parallel such that the adjacent waved wires are entwined with each other at the curved portions.

100. (Withdrawn) The netted structure used in seawater according to Claim 86, wherein the copper alloy material is a waved wire having curved portions, and the netted structure has a rhombically netted form made by arranging a large number of the waved wires in parallel such that the adjacent waved wires are entwined with each other at the curved portions.

101. (Withdrawn) The netted structure used in seawater according to Claim 87, wherein the copper alloy material is a waved wire having curved portions, and the netted structure has a rhombically netted form made by arranging a large number of the waved wires in parallel such that the adjacent waved wires are entwined with each other at the curved portions.

102. (Previously Presented) The netted structure used in seawater according to Claim 98, wherein the netted structure is configured as a fish cultivation net.

103. (Withdrawn) The netted structure used in seawater according to Claim 99, wherein the netted structure is used as a fish cultivation net.

104. (Withdrawn) The netted structure used in seawater according to Claim 100, wherein the netted structure is used as a fish cultivation net.

105. (Withdrawn) The netted structure used in seawater according to Claim 101, wherein the netted structure is used as a fish cultivation net.

106. (Previously Presented) The netted structure used in seawater according to Claim 102, wherein the fish cultivation net includes a reinforcing frame attached along the lower edge of the net in a ring-shaped manner, and the reinforcing frame maintains the shape of the lower edge of the net and applies a downward tension to the net.

107. (Withdrawn) The netted structure used in seawater according to Claim 103, wherein the fish cultivation net includes a reinforcing frame attached along the lower edge of the net in a ring-shaped manner, and the reinforcing frame maintains the shape of the lower edge of the net and applies a downward tension to the net.

108. (Withdrawn) The netted structure used in seawater according to Claim 104, wherein the fish cultivation net includes a reinforcing frame attached along the lower edge of the net in a ring-shaped manner, and the reinforcing frame maintains the shape of the lower edge of the net and applies a downward tension to the net.

109. (Withdrawn) The netted structure used in seawater according to Claim 105, wherein the fish cultivation net includes a reinforcing frame attached along the lower edge of the net in a ring-shaped manner, and the reinforcing frame maintains the shape of the lower edge of the net and applies a downward tension to the net.

110. (Previously Presented) The netted structure used in seawater according to claim 106, wherein the reinforcing frame is formed of a pipe made of the same copper alloy as the material forming the net.

111. (NEW) A copper alloy material in wire or bar form for forming a netted structure

used in seawater under harsh conditions, wherein the netted structure is exposed to water or waves running at high speed and rubbing, and wherein the copper alloy material comprises a composition that does not include Mn and that does not include Ni, wherein the composition includes:

- (a) 62 to 91 mass% of Cu;
- (b) 0.6 to 3 mass% of Sn;
- (c) one or more elements selected from the group consisting of 0.02 to 1.5 mass% of Al, and 0.02 to 1.9 mass% of Si; and
- (d) the balance being Zn, wherein the composition satisfies the relationship derived from the Cu content [Cu], the Sn content [Sn], the Al content [Al], and the Si content [Si], in terms of mass%,

$62 \leq [\text{Cu}] - 0.5[\text{Sn}] - 3.5[\text{Si}] - 1.8[\text{Al}] \leq 90$, wherein the copper alloy material has a phase structure including an α phase, a γ phase, and a δ phase, and the total area ratio of the α , γ , and δ phases is 95 to 100%, and the copper alloy material forms an Al-Sn coating or a Si-Sn coating when in seawater.

112. (NEW) A copper alloy material in wire or bar form forming a netted structure used in seawater under harsh conditions, wherein the netted structure is exposed to water or waves running at high speed and rubbing, and wherein the copper alloy material comprises a composition including:

- (a) 62 to 91 mass% of Cu;
- (b) 0.6 to 3 mass% of Sn;
- (c) one or more elements selected from the group consisting of 0.02 to 1.5 mass% of Al, and 0.02 to 1.9 mass% of Si; and
- (d) the balance being Zn, wherein the composition satisfies the relationship derived

from the Cu content [Cu], the Sn content [Sn], the Al content [Al], and the Si content [Si], in terms of mass%,

$62 \leq [\text{Cu}] - 0.5[\text{Sn}] \leq 90$, wherein the copper alloy material has a phase structure including an α phase, a γ phase, and a δ phase, and the total area ratio of the α , γ , and δ phases is 95 to 100%, and the copper alloy material has an Al-Sn surface coating or a Si-Sn surface coating.

113. (NEW) The copper alloy material according to Claim 1, wherein the phase structure does not include a β phase, and the γ phase is arranged into fractured spherical fragments.

114. (NEW) The copper alloy material according to Claim 1, wherein the phase structure includes a β phase, and the γ phase and the β phase are arranged into fractured spherical fragments.